

Notice of Allowability

Application No.

09/597,371

Applicant(s)

KELLER ET AL.

Examiner

Art Unit

Bharat N. Barot

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed on 01/21/2005.
2. ☒ The allowed claim(s) is/are 1-12, 14-16, 18-22, and 24-28 re-numbered as 1-25.
3. ☒ The drawings filed on 10/2/2003 & 2/2/2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

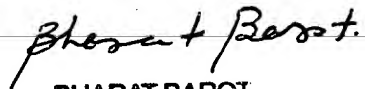
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


BHARAT BAROT
PRIMARY EXAMINER
(571)272-3979

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Jonathan A. Platt (Reg. No. 41,255) on April 27, 2004.

3. The application has been amended as follows:

In the Claims: Claims 1, 4-5, 8, 11-12, 21, 24, and 26-28 have been amended.

Claim 1 (Currently Amended) A method of communicating within a network interface apparatus, the method comprising:

creating special ~~internal communication~~ frames for internal communication in a first part of the network interface apparatus, wherein the special frames each include:

an identifier that distinguishes the special frames from other frames

passing through the network interface apparatus; and

physical layer device control information;

sending the special frames from the first part to a second part of the network interface apparatus through at least a media access controller of the network interface apparatus, wherein the second part includes a physical layer device;

identifying the special frames from among incoming frames incoming to the second part from the first part, wherein the identifying includes examining the incoming frames for the presence of the identifier; and

extracting the physical layer device control information from the special frames at the second part.

Claim 4 (Currently Amended) The method of claim 1, further comprising controlling the physical layer device using the physical layer device control information.

Claim 5 (Currently Amended) The method of claim 1, wherein the extracting the physical layer device control information includes changing the contents of memory registers of the second part.

Claim 8 (Currently Amended) The method of claim 1, further comprising creating additional special ~~internal communication~~ frames for internal communication in the second part the additional special frames including an additional identifier, and passing the additional special frames to the first part.

Claim 11 (Currently Amended) A network interface apparatus comprising:
a network medium interface which includes a physical layer device;
a media access controller operatively coupled to the network medium interface;
and

a device driver arrangement operatively coupled to the media access controller, the device driver arrangement including a device driver operatively configured to communicate with the media access controller, and an intermediate driver operatively configured to communicate control information to the network medium interface;

wherein the intermediate driver and the network medium interface are operatively configured to communicate via special ~~internal communication~~ frames created for internal communication which include the control information.

Claim 12 (Currently Amended) The apparatus of claim 11, wherein the network medium interface includes a second media access controller operatively coupled to the and a physical layer device.

Claim 21 (Currently Amended) A network interface apparatus comprising:
a network medium interface which includes a physical layer device;
a media access controller operatively coupled to the network medium interface;
a device driver operatively configured to communicate with the media access controller; and

means for controlling the physical layer device by passing control information through the media access controller,

wherein the means for controlling includes means for creating and sending special ~~internal communication~~ frames for internal communication which include the control information.

Claim 24 (Currently Amended) The apparatus of claim 21, wherein the means for crating the special ~~internal communication~~ frames for internal communication includes means for creating frames that are treated by the media access controller as data frames.

Claim 26 (Currently Amended) The method of claim 1, wherein the special ~~internal communication~~ frames are sent only within the network interface apparatus, and are not passed outside the network interface apparatus.

Claim 27 (Currently Amended) The apparatus of claim 11, wherein the network medium interface is configured to prevent passing of the special ~~internal communication~~ frames outside of the network interface apparatus.

Claim 28 (Currently Amended) The apparatus of claim 21, wherein the network medium interface is configured to prevent passing of the special ~~internal communication~~ frames outside of the network interface apparatus.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

ADDITIONAL REFERENCES

5. The examiner as of general interest cites the following references.
- a. Gaspar et al, U.S. Patent No. 6,834,313.
 - b. Barghouit et al, U.S. Patent No. 6,535,521.
 - c. Bjorkqvist et al, U.S. Patent No. 6,456,629.
 - d. Vangemert, U.S. Patent No. 6,289,386.
 - e. Fischer et al, U.S. Patent No. 6,229,817.

CONTACT INFORMATION

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bharat Barot whose telephone number is (571) 272-3979. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, can be reached at (571) 272-3978.

Any inquiry of general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Patent Examiner Bharat Barot

Art Unit 2155

April 27, 2005

Bharat Barot
BHARAT BAROT
PRIMARY EXAMINER



Approved
P.B.

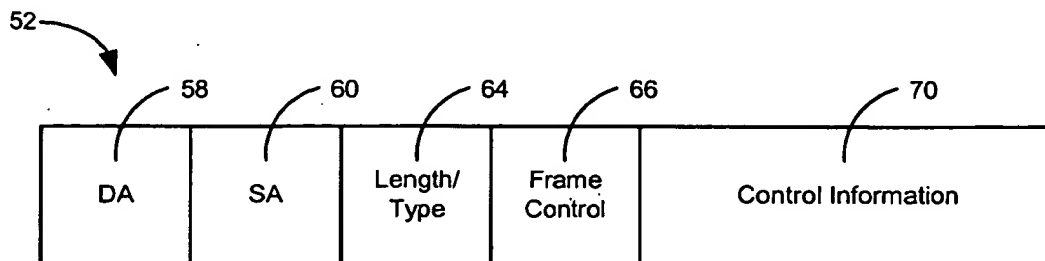


FIG. 2

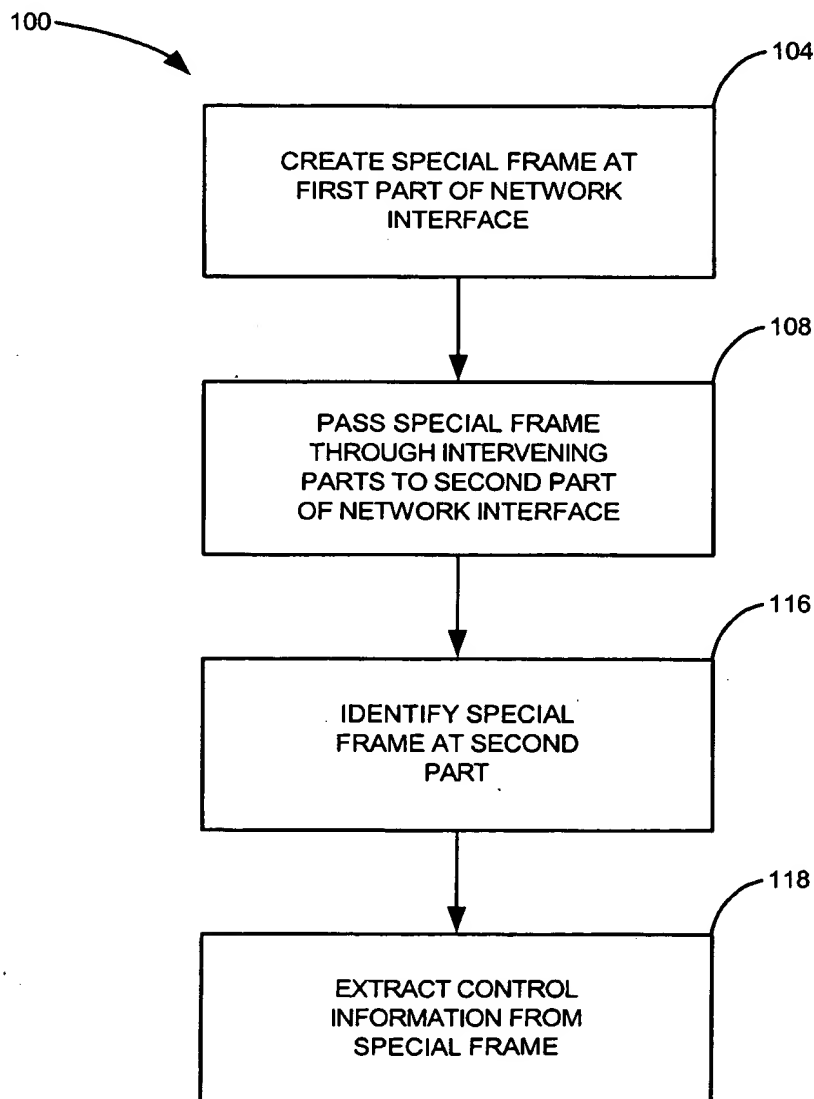


FIG. 3